

INSIDE TRACKS

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Water Temperature Fix Coming to Hungry Horse Dam

Like many things worth doing, it's just taken time.

After more than 15 years of debate, a water temperature control device has been approved for Hungry Horse Dam as part of the overall Hungry Horse Mitigation Plan.

"Research and planning took a serious turn in 1990 when we entered the formal process of mitigation planning," said FWP Fisheries Program Officer Brian Marotz. He added that the Northwest Power Planning Council approved the concept of the temperature control structure in 1991.

After a period of planning, the U.S. Bureau of Reclamation, the agency that operates the dam, will begin building the high-tech structure this summer.

"The bureaucratic process was challenging," said Dennis Christenson, supervisor at the dam. "The fisheries mitigation process under the North-

west Power Planning Council got the ball rolling after years of study. The most important thing was the overwhelming public support shown throughout the long public involvement process. The local grassroots effort convinced the politicians that it was the right thing to do."

Christenson praised the Bonneville Power Administration for their support of the project. "BPA came up with the initial funding for project design," he said. "Because of this, we didn't have to wait three years for the federal budgeting process."

The temperature control device will allow water managers to draw warmer water from various depths in the reservoir (referred to as "selective withdrawal") and meet a target water temperature as the South Fork discharges from Hungry Horse Dam. No longer will fish and other aquatic life in the South Fork and in the Flathead River downstream be subjected to "deep freeze" releases of water during the summer from the existing outlet deep below the reservoir surface.

The return to normal water temperatures in the river will yield big

benefits for fish and their food items, according to Marotz, who supervised the biological aspects of the project.

"On the average, we should see a three-fold increase in fish growth in the Flathead River," said Marotz. "Better growth means better survival and reproduction, and that spells a big increase in recreational fishing opportunity." Marotz bases the growth figures on a state-of-the-art computer model developed as part of FWP's fisheries mitigation projects on Hungry Horse and Libby Reservoir.

Marotz said that the benefit/cost ratio for the project is very positive. "People recognize the economic value of fishing and a healthy aquatic environment in the Flathead."

The temperature control project, once estimated to cost between \$12 and \$18 million, was redesigned by Christenson and other Bureau engineers and may actually cost about half the original estimate.

Said Christenson: "I decided to have our Denver Office take a look at our existing trash racks on the inside face of the dam to see if they could be used.

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KEY PLAYERS.

Brian Marotz (left) and Dennis Christenson were instrumental in bringing selective withdrawal to Hungry Horse Dam. According to Christenson, the project is a victory for those concerned with fisheries and for those concerned with an efficient power generating system.



32 Youths Certified in 1st Angler Education Course

Many youths age 10-12 would love to learn about fishing but for one reason or another, don't normally have the chance. FWP's first structured Angler Education Class was designed just for them.

The class was held March 1-5 in Kalispell and included three nights of classroom instruction and an all-day field trip. More than 100 youths signed up for a chance to take the class; 35 were chosen by lottery from the list, and 32 of those completed all course requirements and became Certified Young Montana Anglers.

Students were treated to teaching units prepared and presented by about two-dozen instructors, all experts in their field. Students learned about spin fishing, fly fishing, basic tackle, angler ethics, where to fish, fish biology, aquatic ecology and other subjects. Each student tied an artificial fly

and handled live aquatic insects which artificial flies imitate.

In the field course students learned about water safety, fish hatcheries, fishing techniques including ice fishing, and other topics. The field day wrapped up with a cookout and fish fry. Each youth received a certificate of completion for their 16 hours of instruction.

The course was made possible by the dedication of many volunteer instructors. According to the student evaluations, most youths enjoyed the course. One student wrote, "It was fun, fun, fun!"

The program was modeled after Montana's successful Hunter Education Program. Additional Angler Education Courses are planned for Kalispell, Eureka, Libby and Polson.



A CLASS IN RODS. Steve McGuire demonstrates basic spin fishing equipment to more than 30 youngsters who participated in the Angler Education Course. The class was held March 1-5 in Kalispell. Future classes are planned for Kalispell, Eureka, Libby and Polson.



IT'S ALL IN THE CAST. Fishing Instructor Jerry Smalley helps a student master basic flycasting techniques as part of the field course for Angler Education. The course was made possible by the many dedicated instructors who volunteered their time for the program.

Raffle Held for Anglers with Disabilities

The Canyon Sportsmen Association and the FWP Crossing the Barriers Committee are sponsoring a raffle to finance fishing access sites at area lakes for anglers and others with disabilities.

The raffle prize is a solid walnut, hand-crafted coffee table donated by Mike Clanton of the Canyon Sportsmen. Value of the table is estimated at \$1,000.

The Canyon Sportsmen won a state-wide award earlier this year for previous



RAFFLE PRIZE. Mike Clanton displays the walnut coffee table being raffled to provide funding for fishing access sites for anglers with disabilities.

work on angler access projects for people with disabilities. Many people are benefiting from their efforts.

Raffle tickets are available from Clanton (call 387-5445, or 387-5494), as well as at the Dew Drop Inn near Coram, at other locations in the Canyon, at Flathead Industries in Kalispell and Mission Mountain Enterprises in Ronan.

The drawing will be held on June 16; you need not be present to win.

From the Commissioner: Charlie Decker

The deadline this year for sheep, goat and moose applications is May 1. **DON'T FORGET!!!** Hopefully, moving this deadline up by one month will give successful applicants more time to prepare for this rare opportunity. Licenses will be drawn and mailed in June.

Sheep in Montana must be a little special. This year's tag auctioned at the F.M.A.W.S. annual convention sold for \$310,000. I have some thoughts on a similar tag for a resident of Montana. This would take legislative action, but I would like to see one tag go to a Montana resident. There would be one chance to draw per sportsman for a \$10-\$25 non-refundable fee.

I would also like to hear from sportsmen concerning the proposed 5 percent rollback in license fees. This is just a PROPOSAL, mind you. Pat Graham tells me that we can do business as usual with a 5 percent rollback until 1999. But if there are some areas that you think we could do more, or maybe do a better job—let me know. I am also interested in what you think concerning license fees. Are they too high?

West Yellowstone was the site for the March 4 Commission meeting. The Commission looked at land around Big Sky in the Porcupine and Taylor Fork drainages. These lands are former Plum Creek sections that were purchased by Big Sky Lumber and now are for sale. The land has high habitat value since many park elk winter there. The USFS, FW&P and RMEF are working together to try to put this deal together.

The agenda for the March meeting was fairly light. We approved several fish derbies and handled regular business. That evening, we had an informational presentation on snowmobiling, which is under the authority of FW&P.

On Saturday morning, the Commission went on a snowmobile ride along with 2,000 other snowcats that left West Yellowstone that morning. The thing that impressed me the most was the amount of snowmobile activity around the area: snowcats everywhere!!!

West Yellowstone has a 3 percent resort tax. From November to March, there isn't really much to do in the area other than winter sports. The revenue from the 3 percent tax is rather interesting. (See box at right.) 🐾



Here are some figures on West Yellowstone's 3 percent resort tax revenue:

Nov. 1986	\$ 8,865
1993	\$ 35,490
Dec. 1986	\$ 23,360
1993	\$ 60,108
Jan. 1986	\$ 18,739
1993	\$ 96,975
Feb. 1986	\$ 41,898
1993	\$107,897
Mar. 1986	\$ 16,788
1993	\$ 52,395

Leonard Howke Honored for Volunteer Service

Hunters in northwest Montana owe a debt of gratitude to FWP volunteer Leonard Howke. For years Howke has volunteered on a white-tailed deer project northwest of Kalispell that has resulted in more opportunity for area hunters.

"Leonard has been a great help," said Project Biologist John Morgan. "His expertise and dedication have made it possible to conduct the project in years of limited budgets."

Howke has also served as a volunteer Hunter Education Instructor for nearly 30 years. He is currently the co-lead instructor for the Whitefish area.

Howke said he volunteers to benefit the wildlife resource and to learn

things he can pass along in his hunter education classes. 🐾



VOLUNTEER. Leonard Howke (center) receives a special award of merit from FWP Region One Supervisor Dan Vineent (right) and acting Wildlife Manager Jim Cross. Howke's volunteer services have been a great help on a white-tailed deer project northwest of Kalispell that has resulted in more opportunity for area hunters.

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It turned out they could be, so we avoided having to build additional structures which would have cost millions of dollars."

Christenson said they used an innovative design approach called value engineering, and found that if they went to a D-shaped gate designed to guide the water from different depths, they could cut costs even further. Various innovations were added until the design included a series of gates which will be most efficient in guiding water from various depths through the dam's penstocks.

Both Christenson and Marotz agree that one of the best features of this mitigation technique is that it will not affect power production significantly.

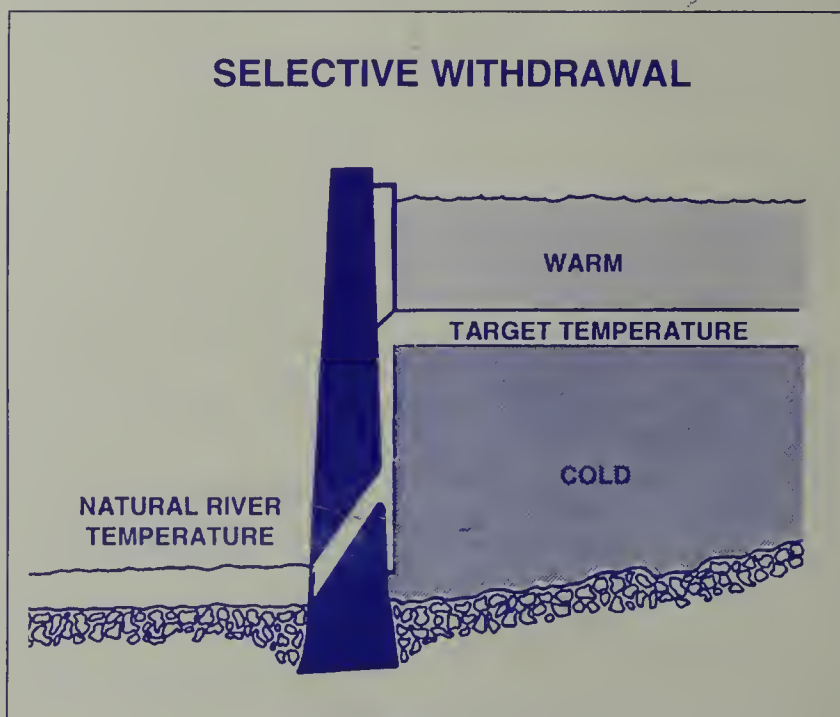
"This is a long-term improvement in the aquatic environment of the Flat-head River," said Marotz. "It's not a short-term fix. And the fact that it will not cause a significant loss in power

production makes it even more attractive." Marotz added that, even though temperature problems can be repaired, flow fluctuations will remain a problem for fish in the river.

Christenson, who holds a well-deserved reputation as a "get it done"

kind of bureaucrat, estimates that the system will be functional by mid-summer of 1995.

"This project is a victory for people concerned with fisheries and for people concerned with an efficient power generating system," he said.



TEMPERATE TARGETS. In a selective withdrawal system, water from various depths in a reservoir is mixed to meet a favorable target temperature for discharge downstream. When the project is complete, fish and other aquatic life downstream from Hungry Horse Dam will no longer experience 'deep freeze' water releases during the summer.

INSIDE TRACKS is published by Region One

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Fish, Wildlife & Parks**



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